

Amendments to the Claims

1. *(Currently Amended)* A method of determining a disconnection time information (~~DTI~~) which is significant for a disconnection period (~~DT~~), in which disconnection period (~~DT~~) an integrated circuit (~~2~~) of a data carrier (~~1~~) designed for contactless communication with a communication partner device has not been adequately supplied with power by means of a power supply field, wherein at least one first storage capacitor (~~C1~~) of the integrated circuit (~~2~~) is charged while the integrated circuit (~~2~~) is being adequately supplied, and wherein the at least one first storage capacitor (~~C1~~) is discharged from a first starting time (~~t1~~) when the integrated circuit (~~2~~) is subsequently no longer adequately supplied, and wherein the disconnection time information (~~DTI~~) is determined on the basis of the discharge behavior, which is affected by the IC material and by radiation, of the at least one first storage capacitor (~~C1~~) and wherein the determined disconnection time information (~~DTI~~) is corrected in dependence on the effects of the IC material and/or on at least one radiation effect.

2. A method as claimed in claim 1, wherein the disconnection time information (~~DTI~~) is determined and corrected on the basis of the discharge behavior of the at least one first storage capacitor (~~C1~~) and on the basis of the discharge behavior of a second storage capacitor (~~C2~~) of the integrated circuit (~~2~~), wherein a renewed charging of the at least one first storage capacitor (~~C1~~) is prevented from a second starting time (~~t2~~) following the first starting time (~~t1~~), from which second starting time (~~t2~~) an adequate supply is re-established, to a determination time (~~t4~~), and wherein the second storage capacitor (~~C2~~) is charged from the second starting time (~~t2~~), and wherein the second storage capacitor (~~C2~~) is discharged from a third starting time (~~t3~~) following the second starting time (~~t2~~), and wherein the discharge voltage of the at least one first storage capacitor (~~C1~~) is compared to the discharge voltage of the second storage capacitor (~~C2~~) at the determination time (~~t4~~) following the third starting time (~~t3~~), and wherein the disconnection time information (~~DTI~~) is determined in dependence on a result of the comparison.

3. A method as claimed in claim 1, wherein the disconnection time information (~~DTI~~) is determined and corrected on the basis of the discharge behavior of the at least one first storage capacitor (~~C1~~), wherein the first storage capacitor (~~C1~~) is charged from a second starting time (~~t2~~) following the first starting time (~~t1~~), from which second starting time (~~t2~~) an adequate supply is re-established, and wherein the first storage capacitor (~~C1~~) is discharged from a third starting time (~~t3~~) following the second starting time (~~t2~~), and wherein the discharge voltage of the first storage capacitor (~~C1~~) is compared to the discharge voltage of the second storage capacitor (~~C2~~) present at the second starting time (~~t2~~) at the determination time (~~t4~~) following the third starting time (~~t3~~), and wherein the disconnection time information (~~DTI~~) is determined in dependence on a result of the comparison.

4. A method as claimed in ~~anyone of the claims 1 to 3~~ claim 1, wherein the disconnection time information (~~DTI~~) is used to decide whether the data carrier (~~1~~) is to respond to certain prompt commands of the communication partner device.

5. An integrated circuit (~~2~~) of a data carrier (~~1~~) designed for contactless communication with a communication partner device, comprising a ,first charging, circuit (~~8~~) for charging at least one first storage capacitor (~~C1~~) of the integrated circuit (~~2~~) while the integrated circuit (~~2~~) is being adequately supplied by means of a power supply field, and comprising a first discharge circuit (~~9~~) for discharging the first storage capacitor (~~C1~~) following a no longer adequate supply of the integrated circuit (~~2~~) from a first starting time (~~t1~~), wherein the discharge behavior of the at least one storage capacitor (~~C1~~) is affected by the IC material and by at least one radiation effect, and comprising determination means (~~12, 18, 19; 22, 24~~) for determining a disconnection time information (~~DTI~~) which is significant for a disconnection period (~~DT~~), in which disconnection period (~~DT~~) an integrated circuit (~~2~~) has not been adequately supplied with power, the disconnection time information (~~DTI~~) being determined on the basis of the discharge behavior of the at least one first storage capacitor (~~C1~~), which is affected by the IC material and by at least one radiation effect, so that the disconnection time information (~~DTI~~) is available from a determination time (~~t4~~), and comprising correction means for the correction of the

determined disconnection time information (~~DTI~~) in dependence on the effects of the IC material and/or the at least one radiation effect.

6. An integrated circuit (2) as claimed in claim 5, wherein a renewed charging of the at least one first storage capacitor (~~C1~~) is prevented with the aid of the determination means from a second starting time (~~t2~~) following the first starting time (~~t1~~), from which second starting time (~~t2~~) an adequate supply is re-established, to a determination time (~~t4~~), and wherein a second storage capacitor (~~C2~~) is provided, and wherein a second charging circuit (~~10~~) is provided for charging the second storage capacitor (~~C2~~) from the second starting time (~~t2~~), and wherein a second discharge circuit (~~11~~) is provided for discharging the second storage capacitor (~~C2~~) from a third starting time (~~t3~~) following the second starting time (~~t2~~), wherein the discharge behavior of the second storage capacitor (~~C2~~) is affected by the IC material and by the at least one radiation effect, and wherein the determination means (~~12~~) are designed for comparing the discharge voltage of the at least one first storage capacitor (~~C1~~) to the discharge voltage of the second storage capacitor (~~C2~~) at the determination time (~~t4~~) following the third starting time (~~t3~~) and for determining the disconnection time information (~~DTI~~) in dependence on a result of the comparison.

7. An integrated circuit (2) as claimed in claim 5, wherein a renewed charging of the at least one first storage capacitor (~~C1~~) can be started with the aid of the determination means (~~6, 22, 24~~) from a second starting time (~~t2~~) following the first starting time (~~t1~~), from which second starting time (~~t2~~) an adequate supply is re-established, and wherein the first discharge circuit (~~9~~) is provided for discharging the first storage capacitor (~~C1~~) from a third starting time (~~t3~~) following the second starting time (~~t2~~), wherein the determination means (~~12~~) are designed for comparing the discharge voltage of the first storage capacitor (~~C1~~) to the discharge voltage of the first storage capacitor (~~C1~~) present at the second starting time (~~t2~~) at the determination time (~~t4~~) following the third starting time (~~t3~~) and for determining the disconnection time information (~~DTI~~) in dependence on a result of the comparison.

8. An integrated circuit (2) as claimed in claim 6, wherein the capacitance of the at least one first storage capacitor (C1) corresponds to a multiple of the capacitance of the second storage capacitor (C2).

9. An integrated circuit (2) as claimed in ~~claim 6 or 8~~ claim 6, wherein the at least one first storage capacitor (C1) and the second storage capacitor (C2) are arranged immediately adjacent to one another in the integrated circuit (2).

10. A data carrier for contactless communication with a communication partner device, which data carrier is provided with an integrated circuit (2) as claimed in ~~anyone of the claims 5 to 9~~ claim 5.

